

Appl. No. 09/912,448  
Amendment dated January 3, 2006  
Reply to Office action of October 3, 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (canceled)

Claim 2 (canceled)

Claim 3 (previously presented): A composition according to Claim 21 wherein said composition further comprises a surface-active agent.

Claim 4 (previously presented): A composition according to Claim 21, wherein said essential oil is selected from the group consisting of cinnamon, savory, red thyme, allspice, bay, birch, cloves, carvacrol, and hinokitiol and mixtures thereof.

Claim 5 (previously presented): A composition according to Claim 21 wherein said composition further comprises an additional antimicrobial ingredient.

Claim 6 (previously presented): A composition according to Claim 21 wherein said composition further comprises at least an optional ingredient selected from the group consisting of protective colloids, adhesives, binding agents, chelating agents, thickening agents, thixotropic agents, penetrating agents, stabilizing agents, sequestering agents, anti-foam agents, antioxidants, natural or synthetic seasonings and/or flavors, dyes and/or colorants, vitamins, minerals, nutrients, enzymes, insecticides, deodorants, and

Appl. No. 09/912,448  
Amendment dated January 3, 2006  
Reply to Office action of October 3, 2005

mixtures thereof.

**Claim 7 (previously presented):** A wipe impregnated with the antibacterial and antifungal composition according to Claim 21.

**Claim 8 (previously presented):** A composition according to Claim 21, packaged in a spray dispenser.

**Claim 9 (previously presented):** A packaging material impregnated with the composition of Claim 21.

**Claim 10 (previously presented):** A method for treating a surface of a food product wherein a composition according to Claim 21 is applied onto said surface.

**Claim 11 (previously presented):** A method for protecting food products from bacterial and fungal infection by contacting the surface of a fruit or vegetable with the composition according to Claim 21.

**Claim 12 (previously presented):** A method for protecting an exposed fresh fruit or an exposed fresh vegetable from postharvest and foodborne pathogens, the method comprising:

- a) applying the composition of Claim 21 to the surface of a fresh fruit or fresh vegetable; and
- b) obtaining a fresh fruit or fresh vegetable that is protected from postharvest and foodborne pathogens.

Appl. No. 09/912,448

Amendment dated January 3, 2006

Reply to Office action of October 3, 2005

**Claim 13 (original):** The method according to Claim 12 wherein said composition is directly applied to said food surface.

**Claim 14 (original):** The method according to Claim 13 wherein said composition is directly applied to said food surface by means of being included in a marinade, breading, seasoning rub, glaze or colorant mixture which is applied to said food surface.

**Claim 15 (original):** The method according to Claim 12 wherein said composition is applied to food packaging material which is thereafter brought into contact with said food surface.

**Claim 16 (previously presented):** A method for inhibiting microbial growth or toxin production in foods contaminated with bacteria and fungi by contacting the surface of a fruit or vegetable with the composition according to Claim 21.

**Claim 17 (previously presented):** A method for reducing the overall bacterial and fungal content of a food product by applying to the surface of said product an effective amount of the composition of Claim 21.

**Claim 18 (previously presented):** The method according to Claim 17 wherein said food product is a fruit, vegetable, or edible nut.

**Claim 19 (previously presented):** A food product having reduced bacteria or fungi as a result of having applied thereon to its surface a composition which demonstrates efficacy against bacteria or fungi or both, comprising the composition of Claim 21.

**Claim 20 (previously presented):** An exposed fresh fruit or vegetable or a mixture of exposed fresh fruits and vegetables, comprising: cut pieces of fruit or vegetable; and a coating on the exposed surfaces of the fruit or vegetable, the coating comprising the composition of Claim 21.

Appl. No. 09/912,448

Amendment dated January 3, 2006

Reply to Office action of October 3, 2005

Claim 21 (previously presented): A composition which has protectant and/or eradican activity and which substantially inhibits bacterial and fungal growth, comprising a chitosan salt and an essential oil in a synergistically effective amount wherein the chitosan salt is present in an amount which is not inhibitory in the absence of the essential oil, wherein the concentration of the chitosan salt is in the range of 0.0016 - 0.1% (v/v), and wherein the essential oil is present in an amount which is not inhibitory in the absence of the chitosan salt, wherein the concentration of the essential oil is in the range of 0.025 - 0.1% (v/v).